

whitish fawn on the throat and limbs, and the speckling as fully marked on the neck and flanks as on the back. No white on the chin; but the whole of the under-parts dirty white, instead of merely the abdomen. Dark dorsal line stopping short about the middle of the back.

For the present, at any rate, I propose to regard the Sze-chuen "white" deer as a race of the Hangul, under the title of *Cervus cashmirianus macneilli*. The occurrence in Sze-chuen of a representative of the Hangul is paralleled by the occurrence in the same province of a local race of the Sambar.

EXPLANATION OF PLATE LXIX.

Cervus cashmirianus macneilli, from the type female from Sze-chuen in the British Museum (Natural History).

5. The Batrachians and Reptiles of Matabeleland.

By E. C. CHUBB, F.Z.S.

[Received April 28, 1909.]

The following list is based entirely upon material in the Rhodesia Museum, Bulawayo, and is intended to give some idea of the Batrachia and Reptilia inhabiting this region, although it cannot claim to be more than tentative, for as soon as extensive collections are made in various parts of the country there will, no doubt, be many species to add.

The localities vary in altitude between 2000 and 4500 feet; the latter figure representing the height of Bulawayo.

In a previous paper dealing with the Mammals of this area* an allusion was made to the probability of the various geological formations supporting distinct faunas, and this appears to be borne out to a remarkable extent by the lizards, no single species of which has as yet been found common to our two principal local formations, viz., granite and schist. Below is given a list of those forms which I have had an opportunity of observing in their haunts; it is arranged to show their habitats according to these two formations.

GRANITE.

Homopholis wahlbergii.

Pachydactylus affinis.

Agama kirkii.

Platysaurus guttatus.

Gerrhosaurus validus.

Mabuia quinquetaeniata.

„ *varia*.

SCHIST.

Pachydactylus bibronii.

Agama distantii.

„ *atricollis*.

Gerrhosaurus flavigularis.

Mabuia striata.

* P. Z. S. 1909, p. 113.

The Matabele names are given wherever it has been possible to ascertain them with certainty, but the natives are not so well acquainted with the names of lizards and snakes as they are with those of mammals and birds. In reading these, it must be remembered that "c," "q," and "x" represent clicks, as in Zulu.

Among the numerous donors of specimens to whom the Museum is indebted, should be specially mentioned Messrs. R. Edge and G. Dally for collections made in the vicinity of Bulawayo.

I must express my warmest thanks to our Vice-President, Mr. G. A. Boulenger, F.R.S., who has been good enough to examine the collection and confirm or correct my determinations.

BATRACHIA.

1. BUFO REGULARIS Reuss.

- a.* Bulawayo.
 - b, c.* Crombie's Store, 16 miles S.E. of Bulawayo, 18 Oct. 1907.
 - d.* World's View, Matopos, April 1908.
- "Ixoxo" is used for all frogs and toads.

2. BUFO CARENS A. Smith.

- a.* Bulawayo.
- b-e.* Crombie's Store, 18 Oct. 1907.
- f.* Kana River, 20 Nov. 1907.

3. PHRYNOMANTIS BIFASCIATA A. Smith.

- a.* Bulawayo, 3 Dec. 1907.
- b.* Shangani River, 23 Nov. 1907.
- c.* Gonda's, Shangani River, 3 Dec. 1907.

4. BREVICEPS MOSSAMBICUS Peters.

- a-c.* Bulawayo.
- d, e.* Near Gwamayaya River, 21 Nov. 1907.

5. RANA DELALANDII D. & B.

- a-c.* Bulawayo.
- d.* Gwamayaya River, 13 Nov. 1907.

6. RANA ANGOLENSIS Bocage.

- a.* Bulawayo, 6 Sept. 1907.
 - b.* Crombie's Store, 18 Oct. 1907.
 - c, d.* World's View, Matopos, April 1908.
 - e, f.* Gwamayaya River, 13 Nov. 1907.
- A number of tadpoles were taken with "b" on Oct. 18th.

7. RANA ADSPERSA Bibr.

- a-d.* Bulawayo.
- e.* Gwamayaya River, 22 Nov. 1907.

8. *RANA MASCARENIENSIS* D. & B.

a. Swena's, Gwamayaya River, 22 Nov. 1907.

9. *PHRYNOBATRACHUS NATALENSIS* A. Smith.

a. World's View, Matopos, April 1908.

b-r. Kana River, 20 Nov. 1907.

s-w. Gwamayaya River, 13 Nov. 1907.

10. *CASSINA SENEGALENSIS* D. & B.

a. Kana River, 20 Nov. 1907.

11. *CHIROMANTIS XERAMPELINA* Peters.

a. Victoria Falls.

This species was observed to change colour in different lights after the manner of a chameleon, though to a less degree.

REPTILIA.

CHELONIA.

1. *CINIXYS BELLIANA* Gray.

a. Near Shangani River, Nov. 1907.

b, c. Essexvale, March 1909.

"Ufutu" is the name applied to all tortoises.

2. *STERNOTHELUS NIGRICANS* Donnd.

a. Near Gwamayaya River, 22 Nov. 1907.

b. Near Gwelo River, 24 Nov. 1907.

3. *TESTUDO PARDALIS* Bell.

a. Near Gwamayaya River, 23 Nov. 1907.

EMYDOSAURIA.

4. *CROCODILUS NILOTICUS* Laur.

The crocodile is common in most of the rivers.

"Ingwenya."

LACERTILIA.

5. *LYGODACTYLUS CAPENSIS* A. Smith.

a. Bulawayo, 24 Oct. 1907.

6. *HOMOPHOLIS WAHLBERGII* A. Smith.

a. World's View, Matopos, April 1908.

b. Mazeppa Mine, Gwanda.

The first example was obtained from a hole in the trunk of a tree; the species is probably arboreal.

7. *PACHYDACTYLUS BIBRONII* A. Smith.*a.* Bulawayo.*b.* Springvale Farm, 16 miles S.E. of Bulawayo, 10 June 1907.

This is our commonest gecko; it is usually found in houses and huts.

"Amacanda-pobolo."

8. *PACHYDACTYLUS AFFINIS* Blgr.*a.* Rhodes' Park, Matopos, April 1908.9. *AGAMA ACULEATA* Merr.*a.* Bulawayo, March 1907.

All our species of *Agama* possess the property, to a greater or less extent, of changing their colour.

10. *AGAMA DISTANTI* Blgr.

This is the commonest *Agama* at Bulawayo. It runs about the ground during the heat of the day, and at other times lives in holes, usually under stones, where its eggs are laid during October and November.

11. *AGAMA KIRKII* Blgr.*a, b* (♂, ♀). Mt. Silozi, Matopos, April 1908.*c-e.* Khami River, Oct. 1907.

Lives among the rocks and is commonly found on granite kopjes.

12. *AGAMA ATRICOLLIS* A. Smith.*a-f.* Bulawayo, Sept. 1907.

Arboreal and common.

"Untulo."

13. *ZONURUS CORDYLUS* Linn.*a.* Bulawayo, 27 Sept. 1907.14. *PLATYSAURUS GUTTATUS* A. Smith.*a-g* (♂, 6 ♀). Mt. Silozi, Matopos, April 1908.*h, i* (2 ♀). Colleen Bawn Mine, Gwanda, Dec. 1908.

Found only on the granite kopjes where it is fairly common.

15. *VARANUS ALBIGULARIS* Daud.*a.* Bulawayo, 3 Feb. 1908.*b.* Bulawayo, March 1909.

Found among rocks on granite kopjes and also on trees.

"Imbulu."

16. *VARANUS NILOTICUS* Linn.*a.* Bulawayo, April 1907.*b.* Yg. Bulawayo, 8 March, 1908.

Almost entirely aquatic.

"Uxamu."

17. *NUCRAS TESSELLATA* A. Smith.*a-c.* Bulawayo.18. *ICHNOTROPIS LONGIPES* Blgr.*a.* Bulawayo, 28 Sept. 1907.*b.* Khami River, Oct. 1907.19. *GERRHOSAURUS VALIDUS* A. Smith.*a.* Mt. Silozi, Matopos, April 1908.*b.* Empandene, Aug. 1908.

Lives among rocks on granite kopjes.

"Isiquisa."

20. *GERRHOSAURUS FLAVIGULARIS* Wiegman.*a-e.* Bulawayo.*f.* Empandene.

Fairly common, may be seen running about the ground among the grass during the warm part of the day.

"Isiquisa."

21. *MABUIA QUINQUETENIATA* Licht.*a, b.* Hellenvale Farm, near Bulawayo.*c.* Khami River, Oct. 1907.*d-g.* Colleen Bawn Mine, Gwanda Dist., Dec. 1908.*h.* Empandene.

Commonly found among boulders of granite kopjes.

22. *MABUIA VARIA* Peters.*a.* Khami River, Oct. 1907.*b, c.* Colleen Bawn Mine, Gwanda Dist., Dec. 1908.*d.* Empandene.

Found only on the rocks and on granite kopjes.

23. *MABUIA STRIATA* Peters.*a-d.* Bulawayo.*e, f.* Rhodes' Park, Matopos, April 1908.

Usually seen on the walls of buildings, in the sun, catching flies. Very common at Bulawayo.

"Umbankwa."

24. *LYGOSOMA SUNDEVALLI* A. Smith.*a.* Bulawayo, 13 Sept. 1907.

RHIPTOGLOSSA.

25. *CHAMÆLEON DILEPIS* Leach.25 A. *CHAMÆLEON QUILENSIS* Bocage (*parvilobus* Blgr.).

Common, though not often seen on account of their assimilative coloration to the surroundings.

"Unwabu."

OPHIDIA.

26. *TYPHLOPS DELALANDII* D. & B.

a, b. Bulawayo, 20 Oct. 1907.

27. *TYPHLOPS MUCRUSO* Peters.

a, b. Bulawayo.

c, d. Matopos.

Var. *VARIUS*.

e-l. Bulawayo.

Both varieties are very common at Bulawayo.

"Inyorka umshlaba."

28. *GLAUCONIA SCUTIFRONS* Peters.

a-h. Bulawayo.

"Insunula."

29. *PYTHON SEBÆ* Gmel.

a. Fort Usher, Matopos.

b. Springvale Farm, 16 miles S.E. of Bulawayo.

c. Syringa.

Commonly found in the hilly country.

"Inshlatu."

30. *BOODON LINEATUS* D. & B.

a-m. Bulawayo.

n. Shangani River, Nov. 1907.

o. Gwamayaya River, Nov. 1907.

31. *LYCOPHIDIUM CAPENSE* A. Smith.

a-c. Bulawayo.

d. Metetsi.

The Bulawayo examples represent form A of the British Museum Catalogue, while the specimen from Metetsi agrees with B.

32. *SIMOCEPHALUS CAPENSIS* A. Smith.

a. Bulawayo, 13 Dec. 1907.

b. Filabusi.

"Inyanda izulu."

33. *PSEUDASPIS CANA* Linn.

a. Yg. Bulawayo, Jan. 1908.

34. *CHLOROPHIS IRREGULARIS* Leach.

a. Victoria Falls, 16 Sept. 1908.

35. *DASYPELTIS SCABRA* Linn.

a, b. Bulawayo.

36. *TARBOPHIS SEMIANNULATUS* A. Smith.

a. Bulawayo.

37. *LEPTODIRA HOTAMBŒIA* Laur.

a. Mazeppa Mine, Gwanda, 1 Nov. 1907.

38. *TRIMERORHINUS TRITÆNIATUS* Gthr.

a-k. Bulawayo.

Fairly common in the neighbourhood of Bulawayo.

"Umshlwazi."

39. *PSAMMOPHIS SUBTÆNIATUS* Peters.

a. Bulawayo, 18 Sept. 1907.

b. Railway Terminus, Matopos, 6 July, 1907.

The latter was caught in the act of swallowing a lizard (*Agama* sp.).40. *PSAMMOPHIS SIBILANS* Linn.

a, b. Bulawayo, 5 Aug. 1908.

c. Swena's, Gwamayaya River, 23 Nov. 1907.

d. Near Gwamayaya River, 24 Nov. 1907.

41. *THELOTORNIS KIRTLANDII* Hallow.

a. Bulawayo, 21 May, 1907.

b. Khami River, 21 April, 1900.

c, d. Empandene, Aug. 1908.

"Ukotikoti."

These specimens seem to combine characters of divisions A and B of the Brit. Mus. Catalogue, having the heads distinctly marked and the black blotches on the necks present.

42. *DISPHOLIDUS TYPUS* A. Smith.

a-e. Bulawayo.

"Indlondlo."

43. *APARALLACTUS CAPENSIS* A. Smith.

a. Bulawayo.

44. *ELAPECHIS GUENTHERI* Bocage.

a. Bulawayo.

b. Deka, about 50 miles south of Victoria Falls.

45. *NAIA HAIE* Linn.

a-b. Bulawayo.

c. Springvale Farm.

d. Railway Terminus, Matopos.

Blackish-brown examples, "C" of the Brit. Mus. Catalogue, are by far the most common, and the natives call them "Imamba." This name is used by the Zulus for *Dendraspis*

angusticeps and it is evident that the Matabele, who are of Zulu descent and migrated from Zululand some 50 years ago, have mistaken the dark variety of *Naie haie* for that species.

Var. ANNULIFERA, Peters.

e. Bulawayo.

f (portion of skin). 15 miles south of Bulawayo.

"Ilunga."

46. NAIA NIGRICOLLIS Reinh.

a-c. Bulawayo.

d. Mazeppa Mine, Gwanda.

e, f. Deka.

I know of several instances here of this species spitting at people who have attacked it.

"Ipimpi."

47. ASPIDELAPS SCUTATUS A. Smith.

a. Empandene, Aug. 1908.

48. CAUSUS DEFILIPPII Jan.

a. Bulawayo, 9 Dec. 1907.

49. BITIS ARIETANS Merr.

a. Bulawayo.

Very common.

"Ibululu."

50. BITIS CAUDALIS A. Smith.

a, b. Bulawayo.

May 25, 1909.

Dr. S. F. HARMER, M.A., F.R.S., Vice-President,
in the Chair.

The Secretary read the following report on the additions made to the Society's Menagerie during the month of April 1909:—

The number of registered additions to the Society's Menagerie during the month of April last was 243. Of these 116 were acquired by presentation, 15 by purchase, 91 were received on deposit, 6 in exchange, and 15 were born in the Gardens.